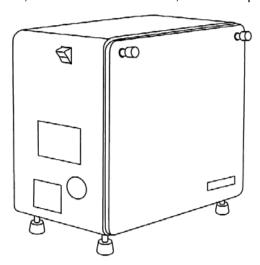
50-32 Cattani Monojet Aspirator (Project 96-14) (12/96)

The Cattani Monojet Aspirator is a single-operatory suction system for use when a central vacuum system is not feasible or available. The system consists of a suction motor, waste collection canister, waste dump

pump, and the necessary hoses required for the connection of the suction system to the dental unit and sanitary sewer. Connection to a sanitary sewer is still required because the unit's 1350-cc waste collection canister is automatically emptied when waste levels reach three quarters (1000 cc) of the total volume. Drainage of the canister takes only a few seconds, after which the suction is restored automatically. The unit is typically positioned on the floor to the side of the dental chair's toe-board. The unit measures 17.5 inches high by 17.5 inches wide by 10.5 inches deep and weighs 26 kg. It features an on/off switch which illuminates upon activation. The unit is powered by a 0.5-horsepower motor that is reported to be quiet and to provide adequate suction for one operatory. The system operates at 115v/60hz or 220v/50hz or 60hz with a loading of 0.4 kW.



Manufacturer:

Cattani S.p.A. Via G. Natta, 6/A-43100 Parma, Italy Distributor: A-dec, Inc. 2601 Crestview Dr. Newberg, OR 97132 (800) 547-1883 (503) 537-2736 (503) 537-2742 FAX

Suggested Retail Price: \$1422.00

Government Price: \$853.00

ADVANTAGES:

- + Efficient and reliable suction system.
- + Noise level was not objectionable to most evaluators.
- + Is an adequate alternative to central suction system for single dental operatory.
- + Safety switch located on the unit's access door panel prevents operation of system when opened.
- + High waste-water sensor prevents overflow of waste canister and activates drain pump to empty waste into the sanitary sewer.
- + Contains a thermal protector with prefixed temperature values of 120°C for the suction motor and 90°C for the drain pump to prevent overheating of the unit.

DISADVANTAGES:

- Staff personnel found it difficult to remove the air and water filter for daily maintenance.
- Installation modifications are required for all but the newest A-dec units.
- Installation instructions and parts/wiring diagrams are inadequate.
- Not UL listed.
- Not suitable for operating room use due to small size of the waste container and electrical safety concerns with flammable gases.

SUMMARY AND CONCLUSIONS:

The Cattani Monojet Aspirator is a reliable, single-operatory suction system. It requires little maintenance other than daily cleaning of the air and water filters. Unfortunately, cleaning these filters is difficult because of the way the system is designed. The unit is quiet due to its design which directs most of the noise out through the ½-inch exhaust line. In fact, its noise level is less than that of a typical home vacuum cleaner. Clinical users felt the system provided adequate suction for routine dental procedures. An overflow water sensor is housed in the lid of the waste canister which automatically shuts the unit down momentarily (without interrupting suction) while the dump pump expels the accumulated waste. The Monojet Aspirator should not be used in an operating room because of safety concerns related to the presence of flammable gases. A thermistor built into the motor windings prevents motor overheating and failure by only allowing the motor to be operated after its windings cool down. A similar device is provided for the waste dump pump. Installation of the Monojet Aspirator is quite simple for most of the newer A-dec units, however, retrofitting the Monojet to older dental units requires additional parts and more complete installation instructions than are currently provided. Despite these limitations, the Cattani Monojet Aspirator provides adequate, reliable, and quiet single-operatory suction and is rated Acceptable for use by federal dental services.